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Shaping the Police Workforce

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Published in:
Policing: An International Journal

DOI:
[10.1108/PIJPSM-11-2017-0135](https://doi.org/10.1108/PIJPSM-11-2017-0135)

Publication date:
2018

Document Version
Peer reviewed version

[Link to publication in Discovery Research Portal](#)

Citation for published version (APA):
Heyer, G. D., & Mendel, J. (2018). Shaping the Police Workforce: a state-of-the-art literature review. *Policing: An International Journal*, 42(2), 165-178. <https://doi.org/10.1108/PIJPSM-11-2017-0135>

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Shaping the Police Workforce: A State of the Art Literature Review

Introduction

In the aftermath of the economic crisis of 2008/9, austerity continues to reshape how many government and local council services are delivered. Policing has been affected both by direct changes in funding but also by broader social changes (such as increasing economic inequality or trends in crime rates) that may change policing needs. Expectations have also changed: policing has evolved beyond just dealing with crime and includes a wider range of problematic social behaviours, which are influencing police resource and expenditure demands. Combined with the changes in social behaviour are changes in the technology of both crime and policing. These are accompanied by an increased workload for staff due to service demand, socio-economic factors, crime trends, and the strategic direction of different police organisations in terms of governance and service delivery methods.

This context is driving policy interest in reshaping the police workforce and restructuring police organisations, in the hope of improving policing efficiency and efficacy in times of economic austerity. It is therefore important to reflect on what research can tell us about the reshaping of the police workforce, in order that this might inform policy. This paper springs from a rapid review of the evidence about the factors shaping the police workforce internationally, commissioned by the Scottish Police Authority and Scottish Institute for Policing Research. The project involved two academic researchers working on the project over a period of months, with the aim of producing high quality work in a timescale that fitted well with policy processes. We sought to answer two questions: what is the optimal size for a police force and what is the most efficient and effective mix of personnel (sworn or officers to civilians) to enable the force to achieve its objectives. This article will outline our methodology before we move to discuss the evidence around force size, workforce composition and the impact of change itself.

Methodology

This state-of-the-art literature review brings together the most relevant recent reviews of police organisations and empirical studies on these issues. The theory of strategic fit, a framework that articulates the degree to which an organization is matching its resources and capabilities with the opportunities in the external environment (Chorn, 1991) is used as the framework to examine the literature. The use of the theory in our review enabled the strategies that have been adopted by police agencies in recent years to be evaluated in relation to the current political and economic environment and to be able to differentiate between police use of resources and their capabilities (Porter, 1996). The starting point of this work was taken as the 1980s or the post-professional era which was the decade that saw the commencement of Community Policing, Problem Oriented Policing and fundamental management changes, such as New Public Management. To collect relevant documents, Google Scholar, EBSCO, JSTOR, NCJRS and ProQuest were searched for documents addressing the key factors shaping the police workforce.¹ Relevant reviews, reports and studies located in this manner were crosschecked against each other and the documents themselves referenced were added to the review; we also drew on our previous reviews of related topics in order to ensure good coverage.

As with an earlier paper written with Fyfe (see Mendel, Fyfe and den Heyer, 2017, p. 4) the policy context of this article means that it serves as an example of how academics can contribute to the policy process by providing: “academic input to review significant amounts of material with limited resources and within a tight timeframe”. The article therefore contributes to both the police reform and research impact agendas. The tight timeframe

¹ Search terms “police organisation size”, “police organisation composition”, and “police civilianisation” were used to search these databases.

means that this review is not systematic, and caution should be taken in generalising from the findings. However, the list of studies, reviews and reports presented in the references concurs with those noted in the literature reviews of the most recent academic studies (McCarty, Ren and Zhao, 2012; Zhao, Ren and Lovrich, 2012; Chalfin and McCrary, 2013), suggesting some level of agreement as to what constitutes the relevant literature in this area.

Police Force Size²

This section will review the evidence regarding police force size and performance, before moving to discuss the example of several police organisations. We consider both what these examples can tell us about the effects of organisation size and also what they tell us about the approach taken in different jurisdictions to determine their preferred size of police organisations. While there have been arguments made in favour of merging forces in a number of jurisdictions, there is not robust evidence that one force size is optimal in terms of efficiency or efficacy (although there are justified concerns about very small forces).

Force size, efficiency and efficacy

Guffey, Larson and Kelso (2010) note that a significant number of studies have failed to show a relationship between the size of a police force and the level of crime. Explanations for this position are: (1) most police work is not devoted to crime reduction, (2) only large increases in police levels can produce enough police presence on the streets to actually deter crime, and (3) the most common police strategies are poor crime prevention strategies. (pp. 201-121). Guffey et al.'s (2010) work also suggests that increasing the ratio of police officers to civilian population does not necessarily reduce crime; however, Donohue and Ludwig (2007) did find an association between increases in the number of police officers and a reduction in both violent and property crime. Loftin and McDowell (1982) concluded that a contrast in research findings exists because the analytical models used are "too simple to account for the relationship between crime and police strength" (p. 400). They suggest that models of police strength need to account for other factors in the social and political environment of police organizations.

While policing is not necessarily a local government activity, work on local government size and efficiency is helpful for considering size and efficiency in policing. It can be difficult to quantify and judge the quality of many agency outputs – for example, it is complex to either count or judge the quality of a police officer's interactions with the public - so 'most studies resort to population-served output measures' (Bish, 2001, p. 12). For Bish (1999), 'economies of scale may exist for a particular [internal] activity' but the local conditions of the particular or specific organizational activity or service 'are much more important than the inherent characteristics of the particular activity' (cited in Bish, 2001, p.14).

Using a range of input data for each police force in England and Wales (covering employment costs, premises-related expenses, transport-related expenses and capital/other costs) and output measures (clear-up rates and the total number of traffic offences that the police and contracted civilian staff, such as traffic wardens deal with in a year), Drake and Simper (2000) found that intermediate-sized forces in England and Wales tended to be more efficient (when one considers scale efficiency) than the largest or smallest forces, concluding that there was 'evidence of significant increasing and decreasing returns ... at the extremes of the size spectrum, ...supportive of a 'saucer-shaped' average cost curve in policing' {

ADDIN EN.CITE

<EndNote><Cite><Author>Drake</Author><Year>2000</Year><RecNum>32</RecNum><DisplayText>(Drake and Simper 2000)</DisplayText><record><rec-number>32</rec-number><foreign-keys><key app="EN" db-id="fw5f5de2caaafyeasxaxs5ecpaxvp9tw2p59">32</key></foreign-keys><ref-type

² This section draws on Mendel, Fyfe and den Heyer (2017).

name="Journal Article">17</ref-type><contributors><authors><author>Drake, Leigh</author><author>Simper, Richard</author></authors></contributors><titles><title>Productivity estimation and the size-efficiency relationship in English and Welsh police forces: An application of data envelopment analysis and multiple discriminant analysis</title><secondary-title>International Review of Law and Economics</secondary-title></titles><periodical><full-title>International Review of Law and Economics</full-title></periodical><pages>53-73</pages><volume>20</volume><number>1</number><dates><year>2000</year></dates><isbn>0144-8188</isbn><urls><related-urls><url>http://www.sciencedirect.com/science/article/B6V7M-402K883-4/2/7d7985c59802015dd901580164a10e20</url></related-urls></urls><electronic-resource-num>Doi: 10.1016/s0144-8188(00)00021-1</electronic-resource-num></record></Cite></EndNote>}. This finding is supported by earlier United States research. Douglas and Tweeten (1971), found a U-shaped cost curve with the lowest point being with municipalities with populations between 250,000 and 500,000, while Beaton (1974), found economies of size existed only for very small sized cities with populations of less than 2,000 people.

Drake and Simper (2000) also acknowledged that, in terms of pure technical efficiency, it was the smallest and largest forces that tended to do better, and Simper and Weyman-Jones (2008) argue that 'English and Welsh police force mergers could lead to increases in police staff resource efficiencies between 10% and 70%' { ADDIN EN.CITE <EndNote><Cite><Author>SIMPER</Author><RecNum>31</RecNum><DisplayText>(SIMPER and WEYMAN-JONES)</DisplayText><record><rec-number>31</rec-number><foreign-keys><key app="EN" db-id="fw5f5de2caaafyeasxas5ecpaxvp9tw2p59">31</key></foreign-keys><ref-type name="Electronic Article">43</ref-type><contributors><authors><author>Richard SIMPER</author><author>Thomas WEYMAN-JONES</author></authors></contributors><titles><title>Evaluating Gains from Mergers in a Non-Parametric Public Good Model of Police Services.</title></titles><dates></dates><publisher>Loughborough University</publisher><urls><related-urls><url>http://www.lboro.ac.uk/departments/sbe/RePEc/lbo/lbowps/SWJ_%28EJ%29.pdf</url></related-urls></urls></record></Cite></EndNote>}. The efficiency of medium-sized agencies was supported by Kimmel's (1997) evaluation of the merger of eight police agencies in Pennsylvania. Kimmel found that the merged police force had 28 percent less total costs and 25 percent less cost per officer than the same non-merged agencies.

Policing is extremely labour-intensive and increasing the size of an agency may not, by itself, improve the effectiveness and the efficiency of the agency or reduce costs. McLaughlin, Atherton and Morrison (2009) found that United States municipalities with between 25,000 and 250,000 were more efficient than smaller and larger sized municipalities, but the relationship did not hold for the provision of all police services.

The research available ultimately does not show whether larger consolidated police agencies are more efficient and effective than smaller non-consolidated police agencies. A significant limitation in the research is that the majority of consolidation proposal reports 'were produced after amalgamation was a fait accompli and tended to rationalize rather than criticize its impacts' (Lithopoulos & Rigakos, 2005, p. 339). Writing about consolidation, Lithopoulos and Rigakos (2005) argue that '[t]o suggest that these benefits have been realized would be a difficult claim to substantiate' (p. 339).

England and Wales

In the early 1990's, Her Majesty's Inspectorate of Constabulary (HMIC) suggested an optimum sized police force of 3,500 officers. However, O'Bryne (2001) argued that the costs used in the analysis were crude, not comparable across forces and were 'not good indicators

of overall efficiency or cost effectiveness' (p. 127). Determining force size based on an establishment figure fails to take account of the functional needs of the organisation or the community involved (Loveday, 2006).

The identification of a minimum number of officers as a benchmark for force efficiency and effectiveness documented in the HMIC report created extensive criticism as the figure used was arbitrary and was not based on adequate analysis or research (Godfrey, 2007). Furthermore, the figure 'did not take into account actual local circumstances and risks' (Godfrey, 2007, pp. 57-58). There was also an allegation that the figure 'had been settled on in order to justify a wholesale reorganisation' as 'only seven of the 43 forces in England and Wales had more than this number of officers' (Godfrey, 2007, pp. 57-58).

The recommendations made by the (2004) White paper were ultimately not followed – owing to extensive criticism and because the government was not able to convince the public of the benefits of merging police forces. The government also realized that the debate of the structure of the police force not only centred on technical issues, but was 'one that went to the heart of the relationship between police and the communities they serve' (Godfrey, 2007, p.75).

To quieten the debate regarding the size of the police force and mergers, in the mid-1990s, the government developed the concept of a primary operational police unit, which was referred to as a Basic Command Unit (BCU). Each Unit comprised of between 150 and 200 officers (O'Bryne, 2001). BCU's were a two-tiered system and were designed to replace the extant police divisions and sub-divisions and were to be the future building blocks of police forces (Loveday, 2006c). However, BCUs did not settle questions about the scales at which decisions can be made: after a large number of BCUs were established across the country, the issue of their optimal size was raised. A number of BCU's were established with over 400 officers and at least one force had BCUs with more than 1,000 officers (O'Bryne, 2001). What was significant at the time, was 'how quickly the consensus on the ideal number [of officers] broke down' (O'Bryne, 2001, p. 125).

Other jurisdictions

The question of organisation size was taken up in a Canadian context by { ADDIN EN.CITE <EndNote><Cite><Author>McDavid</Author><Year>2002</Year><RecNum>11</RecNum><Pages>542-4</Pages><DisplayText>(McDavid 2002, 542-544)</DisplayText><record><rec-number>11</rec-number><foreign-keys><key app="EN" db-id="rs02r0d9o0tppderfx15rx5ext9sf5de20v0">11</key></foreign-keys><ref-type name="Journal Article">17</ref-type><contributors><authors><author>McDavid, James C.</author></authors></contributors><titles><title>The impacts of amalgamation on police services in the Halifax Regional Municipality</title><secondary-title>Canadian Public Administration</secondary-title></titles><periodical><full-title>Canadian Public Administration</full-title></periodical><pages>538-565</pages><volume>45</volume><number>4</number><dates><year>2002</year></dates><publisher>Blackwell Publishing Ltd</publisher><isbn>1754-7121</isbn><urls><related-urls><url>http://dx.doi.org/10.1111/j.1754-7121.2002.tb01858.x</url></related-urls></urls><electronic-resource-num>10.1111/j.1754-7121.2002.tb01858.x</electronic-resource-num></record></Cite></EndNote>}, who argued (while noting limitations in the available data) that:

'Research on the impacts of amalgamating police departments tends to support the conclusion that costs increase, and, where they do not, service levels are reduced as the number of sworn officers are reduced...There do not appear to be any substantial economies of scale in the production of police services overall. There may well be scale economies in the production of support services...but these are more than offset by the substantial labour cost increases that are usually associated with

amalgamations. Where costs have decreased, there have been corresponding decreases in service levels. In some cases, post-amalgamation cost-increases have also been accompanied by service decreases' (pp. 542-544).

The examples that McDavid draws on are mainly from the United States and Canada and there are therefore questions regarding to what extent this can be generalised to other countries. It should also be noted that it is hard to distinguish between the effects of force size and the effects of processes of amalgamation itself: for example, disruption caused by reform could outweigh modest gains from the move to a more optimal force size.

By contrast, and writing from a practitioner perspective, Scobbie { ADDIN EN.CITE <EndNote><Cite><Author>Scobbie</Author><Year>2010</Year><RecNum>7</RecNum><Pages>1</Pages><DisplayText>(Scobbie 2010a, 1)</DisplayText><record><rec-number>7</rec-number><foreign-keys><key app="EN" db-id="rs02r0d9o0tpdferfx15rx5ext9sf5de20v0">7</key></foreign-keys><ref-type name="Electronic Article">43</ref-type><contributors><authors><author>Chris Scobbie</author></authors></contributors><titles><title>Benchmarking - Garda Information Document</title></titles><dates><year>2010</year></dates><publisher>Sustainable Policing Project</publisher><urls></urls></record></Cite></EndNote>} relays a more positive case for amalgamation by using the example of the Garda as a national, unitary force. A Garda representative quoted by Scobbie argues that:

'There is enormous advantage in being a unitary force....we need only one ... HR department, one IT section, one change management section, one policy section, one security section, one national traffic unit etc. The cooperation and coordination benefits are enormous and the reduction in resource waste is very significant' { ADDIN EN.CITE <EndNote><Cite><Author>Scobbie</Author><Year>2010</Year><RecNum>7</RecNum><Pages>6</Pages><DisplayText>(Scobbie 2010a, 6)</DisplayText><record><rec-number>7</rec-number><foreign-keys><key app="EN" db-id="rs02r0d9o0tpdferfx15rx5ext9sf5de20v0">7</key></foreign-keys><ref-type name="Electronic Article">43</ref-type><contributors><authors><author>Chris Scobbie</author></authors></contributors><titles><title>Benchmarking - Garda Information Document</title></titles><dates><year>2010</year></dates><publisher>Sustainable Policing Project</publisher><urls></urls></record></Cite></EndNote>}.

Uncertainty, and common arguments for larger police organisations

With the background of limited evidence for larger or smaller forces, recommendations for merging police agencies are usually based on 'three underlying and little-examined assertions':

1. specialization and professionalization are necessary requisites for effective urban law enforcement;
2. large sized agencies are necessary for specialization and professionalization; and
3. large-scale police agencies are thought to be more efficient in that they are able to produce the same or higher levels of output at lower costs than small sized departments (adapted from Ostrom, Parks and Whitaker, 1973, p. 423).

These assertions form the basis of an argument where the proponents of police agency mergers claim that:

1. small sized departments cannot provide the level and type of service needed in complex urban areas; and

2. small sized departments cannot produce services at costs as low as large sized departments (adapted from Ostrom, et. al., 1973, p. 423).

The assertions and the claims mentioned above are intertwined with the economic theory of organizational economies of scale. Smaller sized police agencies 'with lower per capita expenditure levels than larger departments are automatically assumed to be providing inferior services' (Ostrom, et. al., 1973, p. 423). However, police managers must be careful in assuming that improvements in service delivery effectiveness are 'possible merely by increasing the size of the organisation' (O'Byrne, 2001, p.128).

Despite prominent claims that larger police organisations will be more effective, there is considerable uncertainty. While there may be reasonable evidence that very small force structures (for example, small town forces in parts of the United States) are suboptimal, current published research does not allow one to predict whether a moderate or large force will work better (see Mendel, Fyfe and den Heyer 2017).

Police Forces and Civilianization

This section discusses police force workforce reform in the context of civilianization. To identify that changing the personnel mix of a police force to improve service delivery efficiency and effectiveness "is difficult or challenging is an understatement" (King & Wilson, 2014, p. 1). The section examines the skill requirements in relation to police force size, civilianization programs and the impact on the force following adopting a civilianization program.

Skill Requirements

Force size and structure impacts upon the skills which are needed: for example, a particular skill set will be needed to run a very large force (Pertile, 2006, p. 20). The skill mix may also be affected by the different opportunities in different size organisations (Pertile 2006) and may be harmed by over-centralization: whether of services (Collantes Celador 2009), or by limiting progression opportunities for officers in some roles (Loveday 2006). For Stinchcomb and Ordaz (2007), organisational culture is also important for building and maintaining particular skills within an organisation.

One of the methods used to lower organizational operating costs following the 2008 economic recession was the adoption of a civilianization program. According to King and Wilson (2014), the adoption of a civilianization program is one of the most frequent methods for police forces to continue providing high-level services to the community during periods of budget constraint. Contemporary roles for civilian employees include clerical support, uniformed first responders to nonviolent calls for service, crime scene investigators, community liaison and executive leaders (King & Wilson, 2014).

Civilianization Programs

Two principles of adopting a civilianization program which have been consistently reinforced in studies should be central to future strategies. Firstly, issues in relation to workforce reform are central to organisational strategy and not simply 'HR [Human Resource] problems' (Gash, 2008). Secondly, workforce issues cannot be dealt with in isolation as they are inextricably related to one another (Gash, 2008). For example, the recruitment of sworn members and civilian members and their future training and development clearly have interdependencies. (Gash, 2008, p. 7)

Many police agencies have implemented civilianisation programmes to reduce agency operating costs. The potential benefits of implementing such a reform program may offer much more than the possible savings through outsourcing (Loveday, 2015). Replacing sworn officers with civilians has been found to lower costs primarily by reducing salaries and

other personnel costs, and reducing training requirements (Schwartz, Vaughn, Walker, & Wholey, 1975). Civilianisation is also viewed as part of the movement toward professionalizing policing and has been a key component of Community Policing (Griffiths, Palmer, Weeks, & Polydore, 2006).

The aim of civilianisation is to reduce the agency's operating costs and improve its levels of service delivery. The variation in roles and responsibilities to which police agencies rely on civilians is extensive (Reaves and Goldberg 1998). Civilians are often employed by the agency as communications room call takers or dispatchers, specialist operations support (crime scene technicians, fingerprint officers, forensic laboratory scientists), forensic computer analysts, and lawyers (Forst, 2000). In United States sheriffs' departments, more than a third of all civilians serve in support of jail operations (Reaves and Smith, 1995). The level of civilianisation in an agency may depend on a number of factors such as the police union or the options considered by the police organisation.

A number of policing or law enforcement roles have become so specialized that agencies have become increasingly reliant on civilians to fulfil these roles. The specialist roles, such as forensic computer technicians, financial crime analysts and lawyers require specific educational and practical qualifications which are often difficult for sworn officers to obtain. This means that agencies need to employ civilians for specific roles if they wish to keep the skilled role within the agency. For Forst (2000), it has become clear over time that civilian staff perform specific specialized roles more effectively than sworn officers. This is because civilian staff are usually trained as specialists, whereas sworn officers are trained as generalists in policing and law enforcement.

The effect of civilianisation on how police operate or how it affects the efficiency and effectiveness of an agency's service delivery is unknown (Police Executive Research Forum, 2013) nor is its effect on the police culture known. According to the Police Executive Research Forum (2013), a civilianisation programme has the potential to improve an agency's efficiency and effectiveness by diversifying an agency's workforce skills and by redirecting the deployment of sworn officers to patrol. It has been suggested that civilians can increase the effectiveness of service delivery and can professionalize some functions by relieving sworn officers from administrative duties (Loveday, 1995; 2006; 2007; 2008; Forst, 2000). The suggestion is based on the belief that the civilian who is appointed to the role will have the appropriate technical training, skills and experience for the role. However, this supposition is extremely hard to prove, as there has not been any research undertaken to examine whether or how a civilianisation program increases the efficiency or effectiveness of an agency's service delivery and there have not been rigorous evaluations to investigate whether such a programme reduces costs.

As identified by some researchers (see for instance Gyapong & Gyimah-Brempong, 1988; Loveday, 2008; 2015), the use of civilianisation as a comprehensive strategy in policing, raises a number of fundamental questions:

1. to what extent is it possible to substitute civilian employees without loss of service delivery efficiency and effectiveness?
2. are civilian employees substitutes or complements to officers in organizational service delivery?
3. how elastic³ is the demand for these factors in the production of police services?
4. will a civilianization program yield substantial reductions in unit costs of police services? (Gyapong & Gyimah-Brempong, 1988).

Civilianisation in the United States

³ Elastic or elasticity is the measurement of how responsive an economic variable is to a change in another.

Police agencies in the United States have implemented civilianisation cautiously, by principally employing civilian staff to replace police personnel who hold office bound jobs, such as, in radio or communications centres.

It has been suggested that the increase in the employment of civilian staff in United States police agencies may be as a result of the introduction and acceptance of Community Policing in the 1980s (Reaves and Goldberg, 1998; Police Executive Research Forum, 2013). However, others have suggested that decreasing agency budgets and increases in crime in the 1980s have contributed to the increase in civilian staff (Guyot, 1979). A third view for the reason for the increase in the number of civilian staff since the 1980s, according to the Police Executive Forum's (2013) evaluation, is that grant recipient organizations sought to increase their service delivery by adding significant new analytic and intelligence capabilities through the hiring of skilled civilians, which enabled sworn staff to be redeployed to patrol duties.

The Benefits of a Civilianization Program

The inclusion of civilian employees in a police force can lead to five benefits. The first benefit is that they are generally less expensive to employ than sworn officers (Chess, 1960; Lewin & Keith, 1976; Schwartz, Vaughn, Waller & Wholey, 1975; Loveday, 1995; 2006; 2007; 2008; Griffiths, et. al., 2006; Martin, 2009; Police Executive Research Forum, 2013). All of these studies identified that civilian employees cost between 23 and 33 percent less than sworn officers in salaries, overheads and other personnel benefits. The second benefit is that civilian staff bring specific or specialized skills (Police Executive Research Forum, 2013). Such specialized skills may be important in modern policing agencies (King & Wilson, 2014), and include legal or scientific training (Chess, 1960), or technology investigative (Police Executive Research Forum, 2013).

The third benefit in employing civilian staff is that they provide greater flexibility in staff assignments and tasks (Guyot, 1979). The flexibility in civilian staff results from that fact they are often exempt from civil service requirements, which means that they are often easy to hire, transfer or to terminate (King & Wilson, 2014). The fourth benefit is that civilian staff can concentrate on administrative and organizational support roles (Loveday, 1995; 2006; 2007; 2008; Griffiths, et. al., 2006; Police Executive Research Forum, 2013), enabling sworn officers to concentrate of the delivery of policing services to the public (Schwartz, et. al., 1975; Guyot, 1979; King & Wilson, 2014). The final benefit is that civilian staff members can help improve the police relationship with the community (Kostelac, 2008). The improvement in the community relationship can be as a result from civilian staff being more representative of the community, especially the minority community, gender diversity (Lewin & Keith, 1976), and through civilian staff being part of the local community (Crank, 1989; Skolnick and Bayley, 1986).

The Detrimental Effects of a Civilianization Program

There are three possible detrimental costs involved in a police force adopting a civilianization program. The first cost could arise from the civilian occupying a position or role that is depriving a sworn officer from fulfilling (Chess, 1960). Police forces often maintain positions for older officers or for officers that are recovering from injury. As claimed by King and Wilson (2014), if a civilian is employed for such a role, the role may no longer be available for a sworn officer. The second cost involved in adopting a civilianization program may result from officer resistance (King & Wilson, 2014). Officer resistance can arise from when a civilian is fulfilling a position previously occupied by a sworn officer or from officer held stereotypes of civilian staff (King & Wilson, 201). For example, officers may resent civilian staff occupying intelligence or investigative support roles, or when civilian staff have access to sensitive information (Forst, 2000).

Civilianisation: summary

As noted above, there thus remains considerable uncertainty about the impact of civilianisation. That said, the literature does provide some evidence that – if well-implemented and well-managed – civilianisation can bring benefits. These benefits might be through improved efficacy (such as an important contribution to neighbourhood policing) or through organisations becoming more efficient by reducing staff costs.

Costs and disruptive aspects of changes⁴

As noted above, there has been considerable interest in changing size, skill mix and other aspects of police organisations. However, as is the case with organisational change in general, police reforms can impair performance if the reforms are mishandled or under-resourced. Even where there is a robust evidence-base for change (which, given the evidence gaps noted above, would often not be the case with some police reforms), the implementation of change can be problematic. In their work around implementation science, Fixsen et al. (2013) argue that, in non-police contexts where there is a strong evidence base for changes, “the focus needs to shift to defining ‘programs’ and to developing state-level infrastructures for statewide implementation of evidence-based programs and other innovations in human services” (p. 213).

In a United Kingdom context, Brain (2010) notes that previous force amalgamations had some significant impacts on the forces involved; traditions of forces were seen to be lost, there were tensions, and communities sometimes felt that the new forces were out of touch or were subsidising other areas. Insofar as reform “has tended to oscillate” between different foci (Innes, 2005, p. 157), these harms can be repeated during various oscillations.

This concern about culture is supported by den Heyer’s (2016) research into the establishment of Police Scotland. Den Heyer found that 50 percent of those interviewed for the research stated that the biggest challenge in implementing the merger was the different cultures of the previous eight forces. Brain goes on to argue how, when the Westminster government was seeking police mergers in the mid-1990s, it ‘seem[ed] incredible’ that the government would put so much time and effort into this idea of mergers, and have police do the same, ‘without fully understanding the financial requirements and difficulties’ { ADDIN

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<EndNote><Cite><Author>Brain</Author><Year>2010</Year><RecNum>37</RecNum><Pages>373</Pages><DisplayText>(Brain 2010, 373)</DisplayText><record><rec-number>37</rec-number><foreign-keys><key app="EN" db-id="fw5f5de2caaafyeasxaxs5ecpaxvp9tw2p59">37</key></foreign-keys><ref-type name="Book">6</ref-type><contributors><authors><author>Brain, Timothy</author></authors></contributors><titles><title>Policing in England and Wales from 1974: A Turbulent Journey</title></titles><dates><year>2010</year></dates><pub-location>Oxford</pub-location><publisher>Oxford University Press</publisher><urls></urls></record></Cite></EndNote>}. Brain is critical of the idea – advanced in the mid-2000s – that one could simply rely on ‘efficiencies’ to fund mergers rather than supplying additional resources. This resonates with work in implementation science that emphasises the importance of having “implementation infrastructure”, as well as a desirable end state to change to (Fixsen et al. 2013, p. 215).

In Sweden, the evaluation of the impact of creating national agencies also emphasises that ‘Major organisational reforms are costly, especially in the initial stages’ (Statskontoret, 2010) and that there were often shortcomings when it came to estimating the costs of these reforms. Specific areas highlighted where costs arise include:

⁴ This section is largely drawn from Mendel and Fyfe, 2011, pp.15-6.

- restructuring costs for staff;
- costs of recruitment and skills development;
- introduction of new IT systems;
- costs of new premises when activities are relocated or new offices opened; and
- losses in terms of work efficiency during a transitional period when new units or concentrated activities are established.

However, given that the disruptions associated with workforce change can be significant, it is regrettable that there is not more extensive research on *processes* of workforce change as well as different workforce *structures*. While there is considerable discussion of the costs of more radical changes to police services – such as what was seen in Bosnia (see Juncos 2011) – the costs of more ‘normal’ workforce reform gets far less attention.

Conclusions

The theory of strategic fit enables the examination of a strategy’s appropriateness to a given set of environmental conditions while taking into account the organizational culture and leadership style (Chorn, 1991). This state-of-the-art literature review has examined the alignment of the optimal size of police forces with their mix of personnel to achieve organizational strategic fit and for forces to achieve their objectives. We find that there is considerable uncertainty. While there has been previous discussion on the benefits of larger or smaller forces (often in the context of police mergers) there is not robust evidence that a particular force size is optimal for either efficacy or efficiency, although very small forces may struggle in some ways. There is also mixed evidence about whether increasing police organisation resourcing to allow more officers to be employed reduces crime levels, and there is a relative lack of evidence about the impact this has on the other areas of community life in which police are involved. While there is less work on workforce mix and civilianisation, there is a suggestion that this can – in certain circumstances – bring benefits in terms of both efficiency and efficacy. However, it is important for any civilianisation programme to take place in the context of an appropriate broader organisational strategy.

There are major weaknesses in research relating to police organizational reform: there is no accepted theory of police reform, no accepted method as to how such a reform should be evaluated nor have there been any comparative studies of earlier police civilianization programs (Braithwaite, Westbrook and Ledema, 2005). Rather, previous work on this topic often focuses on which organisational structure – whether in terms of workforce mix or size – is most efficient or effective. Against this, we argue for a shift in the research agenda: given that the effects of many changes to workforce structure are hard to determine, it is also important to take account of the friction involved in processes of change, both in order to build a stronger research understanding of these important aspects of change and to more effectively inform policy. There is also a real need for the development of theories for understanding police reform in general – and workforce restructuring in particular - alongside appropriate methods for researching it.

We have assessed a wide range of research – and, through doing so in the policy context we were working in, further evidenced the potential for academics to have input into policing policy processes. The assessment also supports the theory of strategic fit by the realization that police institutions adopt coping or reform strategies to ensure that they maintain their alignment with their operating environment. This has significant policy implications: organisations reforming their workforce would benefit from maintaining their alignment.

The limitations of the research that is currently available means that considerable uncertainty remains. It is not possible to determine any optimal police organisation size, resourcing level,

or staff mix. More research is needed in order to build a more robust picture of the impact of these different factors; initial research might aim to assess whether these factors have a large enough effect to justify the disruption of change itself. More broadly, there is a lack of any accepted theory of police reform or method for evaluating such reform and a real need for future research to address these weaknesses. Policymakers should be aware of these uncertainties.

While there is reason for concern about very small forces there is, beyond this, no clear evidence of whether larger or smaller police organisations work better. There is evidence that civilianisation can bring benefits, if well-handled – an important finding for both research and policy – but this still does not evidence how far the process should be taken in order to achieve optimal results.

A key finding of this paper is that, when considering reforming the police workforce, one should also be aware of the effects of change itself: the possibility of disruption (especially if change is badly managed) should be weighed against the potential benefits of change. Implementing research findings into police agencies practice and policy is a complex process occurring in a diverse context, and policymakers should carefully consider the impact of change even where there is robust evidence that changes to the police workforce will be beneficial; they should be more cautious when, as will often be the case, there is not robust evidence that this will be beneficial. In this regard, the police could learn from the health sector, which experiences similar implementation problems (Michie and Johnston, 2017). One method adopted by the health sector to improve practice and policy implementation is to question attempts to improve implementation through asking ‘what works, compared with what, how well, for whom, in what setting and why?’ (Michie and Johnston, 2017). Given that the benefits (if any) of changing many police workforce structures are hard to quantify, there is a need for more research on processes of and implementation of workforce change – and on the impact of change processes which may outweigh any efficiency and efficacy differences between workforce structures. Policymakers should be aware of, not just the potential benefits of changes achieved during reform, but also of the impact of processes of change.

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